

antimicrobial agent(s) from the composition. For example, sodium chloride, zinc iodide, sodium citrate, sodium acetate, and sodium lactate can be added to a coating [composition] composition containing silver nitrate to produce a coating which contains the water soluble salts silver nitrate and zinc nitrate, the somewhat water soluble salts silver lactate (67 mg/ml water) and silver acetate (10 mg/ml water), the slightly soluble salt silver citrate (0.3 mg/ml water), the poorly soluble salt silver chloride (0.002 mg/ml water), and the very poorly soluble salt silver iodide (0.00003 mg/ml water). By adjusting the proportions of salts having different solubilities in the composition, the release rate of the active oligodynamic agent(s) can be altered to provide a shorter or longer release profile over time.

Amendments in the Claims

In accordance with 37 C.F.R. §1.121(c), the following versions of the claims as rewritten by the foregoing amendment show all the changes made relative to the immediately previous versions of the claims.

1. (Amended) An article of manufacture comprising a substrate and an antimicrobial polymer coating, wherein the polymer coating comprises one or more polymers and a colloid, wherein the colloid comprises oligodynamic metal compounds, wherein the oligodynamic metal compounds are a plurality of metal salts, a plurality of metal oxides, or a combination of at least one metal salt and at least one metal oxide [of one or more oligodynamic metals].

5. (Amended) The article of Claim 1 wherein the polymer comprises one or more hydrophilic polymers that are soluble in water or in an organic solvent containing water, one or more [a] hydrophobic polymers, or a combination of both hydrophilic and hydrophobic polymers.

6. (Amended) The article of Claim 5 wherein the hydrophilic polymer is selected from the group consisting of polyurethanes, polyvinylpyrrolidones, polyvinyl alcohols, polyethylene glycols, polypropylene glycols, polyoxyethylenes, polyacrylic acid, polyacrylamide, carboxymethyl cellulose, cellulose and its derivatives, dextrans, polysaccharides, starches, guar, xantham and other gums, collagen, gelatins, biological polymers, and mixtures and copolymers thereof.

7. (Amended) The article of Claim 5 wherein the hydrophobic polymer is selected from the group consisting of polytetrafluoroethylene, polyvinyl chloride, polyvinylacetate, poly(ethylene terephthalate), silicone, polyesters, polyamides, polyureas, styrene-block copolymers, polymethyl methacrylate, polyacrylates, acrylic-butadiene-styrene copolymers, polyethylene, polystyrene, polypropylene, natural and synthetic rubbers, acrylonitrile rubber, [cellulose,] and mixtures, derivatives, and copolymers thereof.

8. (Amended) The article of Claim 1 wherein the oligodynamic metal compounds comprise [colloid comprises at least one] silver [salt].

9. (Amended) The article of Claim 8 wherein [the] silver [salt is selected from the group] is present in a compound selected from the group consisting of silver chloride, silver iodide, silver citrate, silver lactate, silver acetate, silver propionate, silver salicylate, silver

bromide, silver ascorbate, silver laurel sulfate, silver phosphate, silver sulfate, silver oxide, silver benzoate, silver carbonate, silver sulfadiazine, [and] silver gluconate, and combinations thereof.

10. (Amended) The article of Claim 1 wherein the [colloid] oligodynamic metal compounds comprise[s the salts of] more than one oligodynamic metal.

11. (Amended) The article of Claim [10] 1 wherein the oligodynamic metal compounds [salts] comprise [salts] compounds having different solubilities in water.

12. (Amended) The article of Claim 11 wherein the oligodynamic metal compounds [salts] comprise silver lactate, silver acetate, silver citrate, silver chloride, and silver iodide.

13. (Amended) An article of manufacture comprising one or more polymers and a colloid wherein the colloid comprises one or more oligodynamic metal compounds, wherein the oligodynamic metal compounds are a plurality of metal salts, [of one or more oligodynamic metals.] a plurality of metal oxides, or a combination of at least one metal salt and at least one metal oxide.

Claims 14-34 have been cancelled.